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## WHAT IS CLAIMED IS:

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- 1. A recording medium comprising a base material and an ink-receiving layer containing a particulate material provided on the base material, wherein the particulate material comprises aluminum oxide particles of the  $\gamma$ -crystal structure, the average particle diameter of the aluminum oxide particles is at least 0.21  $\mu$ m, but at most 1.0  $\mu$ m, at least 90 % of all the aluminum oxide particles have a particle diameter of at most 1.0  $\mu$ m, and the specular glossiness of the surface of the ink-receiving layer is at least 50 % as measured at 75°.
- The recording medium according to Claim 1,
   wherein at least 70 % by weight of the particulate material is aluminum oxide particles of the γ-crystal structure.
- The recording medium according to Claim 1,
   wherein at least 90 % by weight of the particulate material is aluminum oxide particles of the γ-crystal structure.
- The recording medium according to Claim 1,
   wherein the ink-receiving layer comprises a binder, and
   a mixing ratio of the aluminum oxide particles of the γ-

crystal structure to the binder is within a range of from 1:1 to 30:1 in terms of a weight ratio.

5. The recording medium according to Claim 1, wherein the aluminum oxide particles of the  $\gamma$ -crystal structure are particles obtained by heating and calcining boehmite or pseudoboehmite.

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- 6. The recording medium according to Claim 1,
  wherein the aluminum oxide particles of the γ-crystal structure are particles which are produced by heating and calcining boehmite or pseudoboehmite, followed by a step of removing a coarse particle component by a grinding and separating treatment, and from which the
  to coarse particle component has been removed.
  - 7. The recording medium according to any one of Claims 1 to 6, wherein the base material is formed of a fibrous base having a surface layer containing barium sulfate, and the ink-receiving layer is provided on the surface layer.
- 8. The recording medium according to Claim 7,
  wherein the Bekk smoothness of the surface layer is at
  least 400 seconds, and the whiteness degree thereof is
  at least 87 %.

9. An image forming process, comprising the step of applying a recording liquid to the ink-receiving layer of the recording medium according to Claim 1 in response to recording information to form an image.

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- 10. A process for producing a recording medium, which comprises the steps of forming coarse particles of aluminum oxide of the γ-crystal structure by heating and calcining boehmite or pseudoboehmite, removing a coarse particle component by a separating treatment after grinding the formed coarse particles of the aluminum oxide of the γ-crystal structure, and applying a coating formulation comprising the aluminum oxide particles of the γ-crystal structure, from which the coarse particle component has been removed, onto a base material.
- 11. The process according to Claim 10, wherein the average particle diameter of the aluminum oxide particles of the  $\gamma$ -crystal structure is at least 0.21  $\mu$ m, but at most 1.0  $\mu$ m, at least 90 % of all the aluminum oxide particles of the  $\gamma$ -crystal structure have a particle diameter of at most 1.0  $\mu$ m, and the specular glossiness of the surface of the ink-receiving layer is at least 50 % as measured at 75°.

12. The process according to Claim 10 or 11, wherein the coating formulation comprises a binder, and a mixing ratio of the aluminum oxide particles of the  $\gamma$ -crystal structure to the binder is within a range of from 1:1 to 30:1 in terms of a weight ratio.